

STM- Structure Search

7/12/06

19/658,715

=> d ibib abs hitstr 1-9

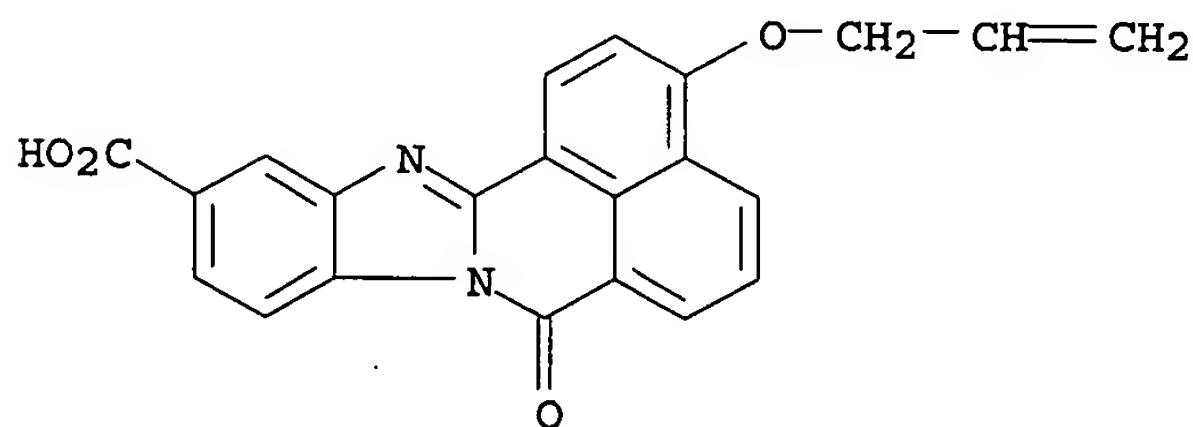
L6 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:569555 CAPLUS
 DOCUMENT NUMBER: 141:76328
 TITLE: Fluorescent monomers and tagged treatment polymers containing same for use in industrial water systems
 INVENTOR(S): Morris, John D.; Moriarty, Barbara E.; Wei, Mingli; Murray, Patrick G.; Reddinger, Jerry L.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. 6,645,428.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004135125	A1	20040715	US 2003-658715	20030909
US 6645428	B1	20031111	US 2000-560881	20000427
TW 570969	B	20040111	TW 2001-90109652	20010703
ZA 2002007690	A	20030925	ZA 2002-7690	20020925
PRIORITY APPLN. INFO.:			US 2000-560881	A2 20000427

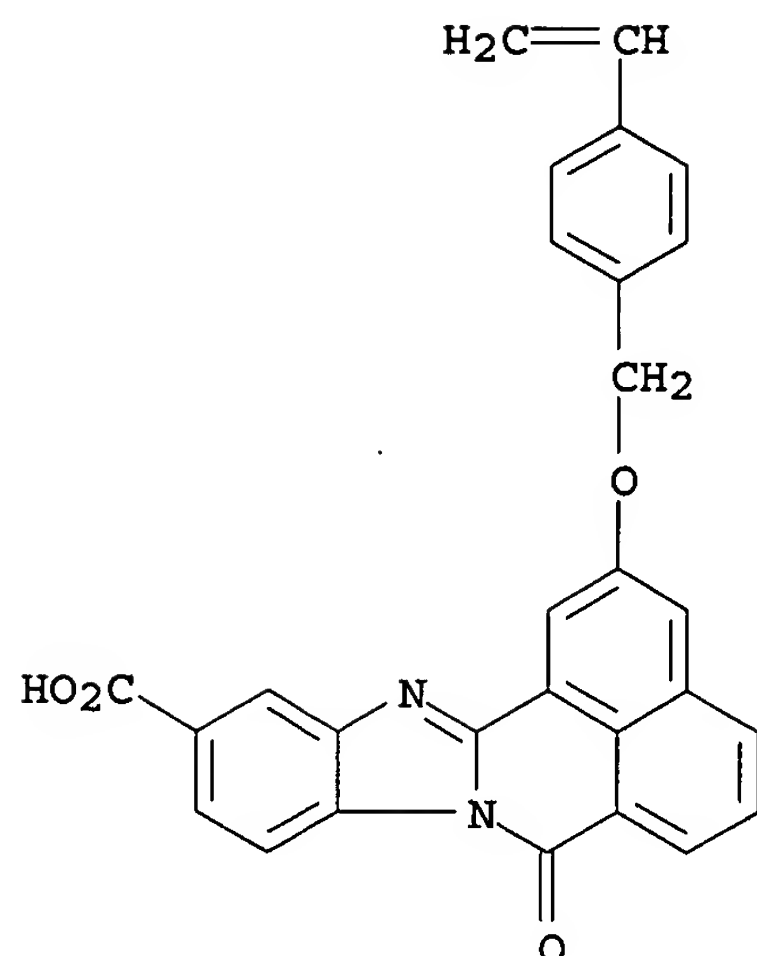
AB Fluorescent monomers are described and claimed which are synthesized by reacting a substituted or non-substituted naphthalic anhydride with an amine and with a moiety containing a polymerizable group. Such monomers are useful for the preparation of tagged treatment polymers. Such tagged treatment polymers are useful as scale inhibitors in industrial water systems.

IT 371239-16-6P 371239-17-7P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (fluorescent monomer; fluorescent monomers and tagged treatment polymers containing same for use in monitoring scale inhibition in industrial water systems)

RN 371239-16-6 CAPLUS
 CN 7H-Benzimidazo[2,1-a]benz[de]isoquinoline-11-carboxylic acid, 7-oxo-3-(2-propenyloxy)- (9CI) (CA INDEX NAME)



RN 371239-17-7 CAPLUS
 CN 7H-Benzimidazo[2,1-a]benz[de]isoquinoline-11-carboxylic acid, 2-[(4-ethenylphenyl)methoxy]-7-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:569554 CAPLUS
 DOCUMENT NUMBER: 141:76327
 TITLE: Fluorescent monomers and tagged treatment polymers containing same for use in industrial water systems
 INVENTOR(S): Morris, John D.; Moriarty, Barbara E.; Wei, Mingli; Murray, Patrick G.; Reddinger, Jerry L.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S. 6,645,428.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004135124	A1	20040715	US 2003-658648	20030909
US 6645428	B1	20031111	US 2000-560881	20000427
TW 570969	B	20040111	TW 2001-90109652	20010703
ZA 2002007690	A	20030925	ZA 2002-7690	20020925
PRIORITY APPLN. INFO.:			US 2000-560881	A2 20000427

OTHER SOURCE(S): MARPAT 141:76327

AB Fluorescent monomers are described and claimed which are synthesized by reacting a substituted or non-substituted naphthalic anhydride with an amine and with a moiety containing a polymerizable group. Such monomers are useful for the preparation of tagged treatment polymers. Such tagged treatment polymers are useful as scale inhibitors in industrial water systems.

IT 371239-16-6P 371239-17-7P

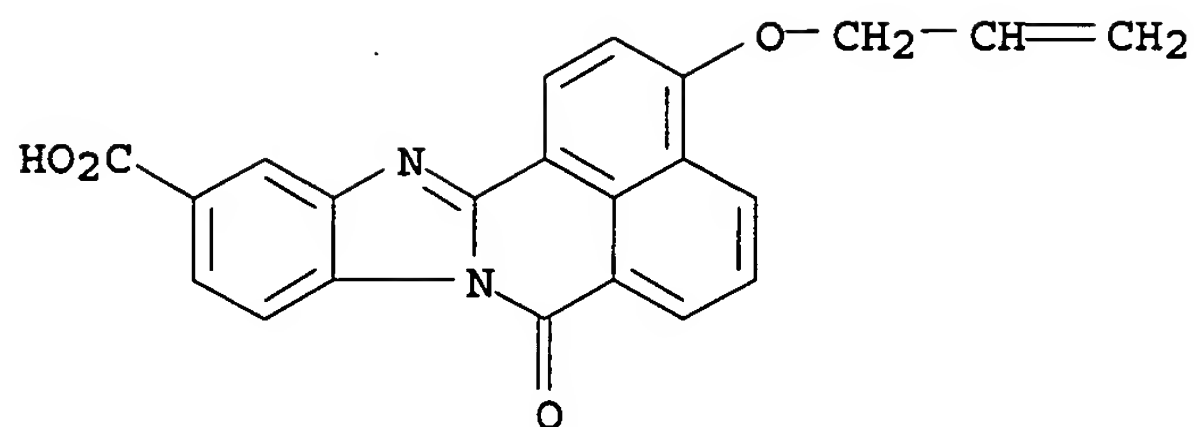
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(fluorescent monomer; fluorescent monomers and tagged treatment polymers containing same for use in monitoring scale inhibition in industrial water systems)

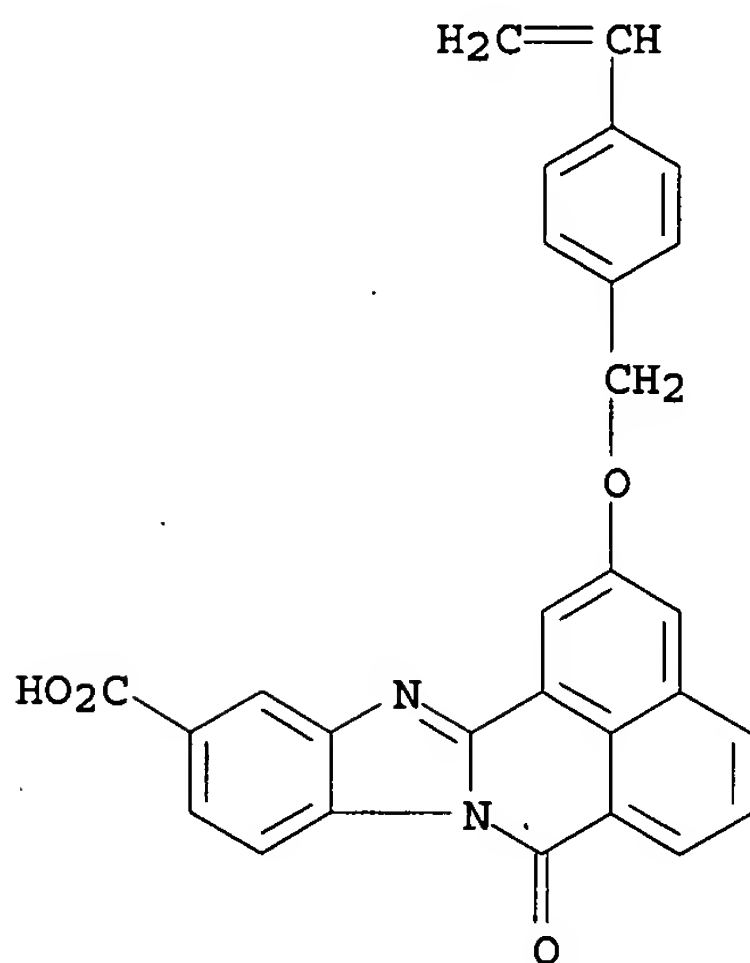
RN 371239-16-6 CAPLUS

CN 7H-Benzimidazo[2,1-a]benz[de]isoquinoline-11-carboxylic acid, 7-oxo-3-(2-propenyloxy)-(9CI) (CA INDEX NAME)

10/658,715



RN 371239-17-7 CAPLUS
CN 7H-Benzimidazo[2,1-a]benz[de]isoquinoline-11-carboxylic acid,
2-[(4-ethenylphenyl)methoxy]-7-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:252014 CAPLUS
DOCUMENT NUMBER: 140:294906
TITLE: Anisotropic films based on 1,8-naphthoylene-1',2'-
benzimidazole sulfonates and lyotropic liquid crystal
systems and methods for making
INVENTOR(S): Dutova, Tatyana Ya.; Sidorenko, Elena N.
PATENT ASSIGNEE(S): Nitto Denko Corporation, Japan
SOURCE: U.S. Pat. Appl. Publ., 17 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004058091	A1	20040325	US 2003-601238	20030620
US 7026019	B2	20060411		
WO 2004003599	A2	20040108	WO 2003-US20260	20030625
WO 2004003599	A3	20040226		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,

10/658,715

PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2003279856 A1 20040119 AU 2003-279856 20030625
EP 1551902 A2 20050713 EP 2003-742256 20030625
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
JP 2005531636 T2 20051020 JP 2004-517930 20030625
US 2006062932 A1 20060323 US 2005-212825 20050825
PRIORITY APPLN. INFO.: RU 2002-117253 A 20020628
US 2003-601238 A 20030620
WO 2003-US20260 W 20030625

OTHER SOURCE(S): MARPAT 140:294906

AB Optically anisotropic films based on sulfoderivatives of
1,8-naphthoylene-1',2'-benzimidazole are disclosed. These compds. form
stable lyotropic liquid crystal systems that exhibit excellent optical
properties with films that are significantly thinner than the current
state of the art. The lyotropic liquid crystal systems may be deposited on
substrates for use in a wide variety of com. applications.

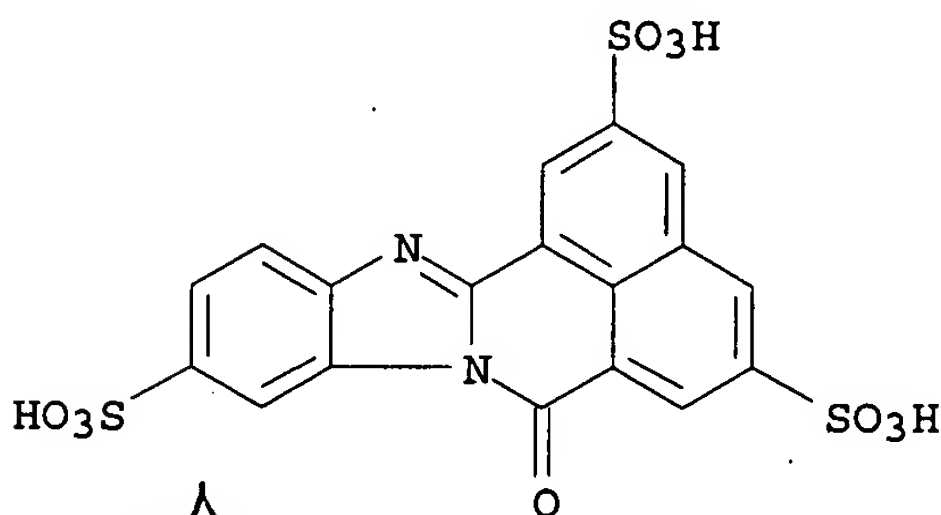
IT 675819-17-7P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
engineered material use); PREP (Preparation); USES (Uses)

(anisotropic films based on 1,8-naphthoylene-1',2'-benzimidazole
sulfonates and lyotropic liquid crystal systems)

RN 675819-17-7 CAPLUS

CN 7H-Benzimidazo[2,1-a]benz[de]isoquinoline-2,5,10-trisulfonic acid, 7-oxo-
(9CI) (CA INDEX NAME)



L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:798496 CAPLUS

DOCUMENT NUMBER: 135:348686

TITLE: Fluorescent monomers and tagged treatment polymers
containing same for use in industrial water systems
INVENTOR(S): Morris, John D.; Moriarty, Barbara E.; Wei, Mingli;
Murray, Patrick Gerard; Reddinger, Jerry L.

PATENT ASSIGNEE(S): Ondo Nalco Company, USA

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001081654	A1	20011101	WO 2001-US13567	20010425

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6645428	B1	20031111	US 2000-560881	20000427
CA 2404311	AA	20011101	CA 2001-2404311	20010425
AU 2001057335	A5	20011107	AU 2001-57335	20010425
EP 1282732	A1	20030212	EP 2001-930837	20010425

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003531283	T2	20031021	JP 2001-578720	20010425
TW 570969	B	20040111	TW 2001-90109652	20010703
ZA 2002007690	A	20030925	ZA 2002-7690	20020925

PRIORITY APPLN. INFO.:

US 2000-560881	A	20000427
WO 2001-US13567	W	20010425

OTHER SOURCE(S): MARPAT 135:348686

AB Fluorescent monomers are described and claimed which are synthesized by reacting a substituted or non-substituted naphthalic anhydride with an amine and with a moiety containing a polymerizable group. Such monomers are useful for the preparation of tagged treatment polymers. Such tagged treatment polymers are useful as scale inhibitors in industrial water systems. In many industrial water systems that employ polymers as water treatment agents it may be desirable to tag or mark such polymers to facilitate monitoring thereof.

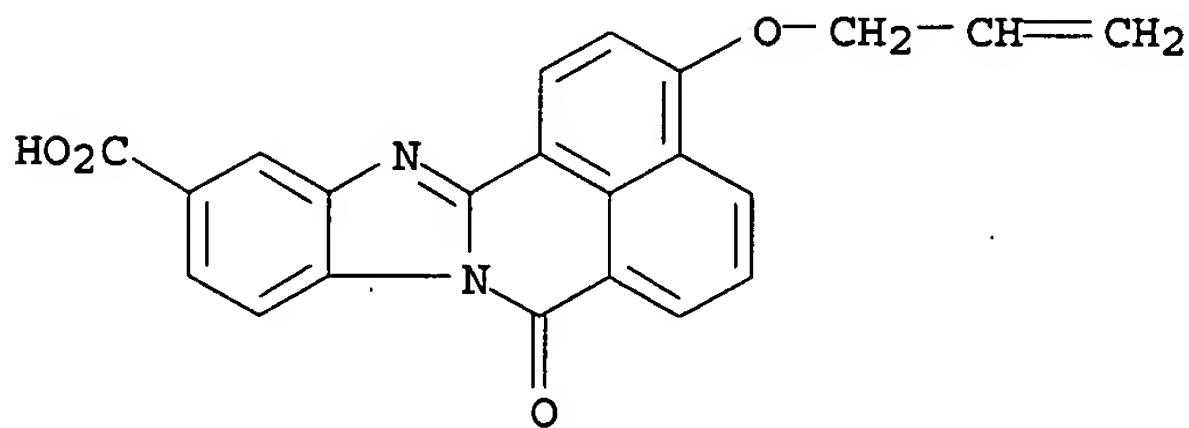
IT 371239-16-6P 371239-17-7P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(fluorescent monomer; fluorescent monomers and tagged treatment polymers containing same for use in monitoring scale inhibition in industrial water systems)

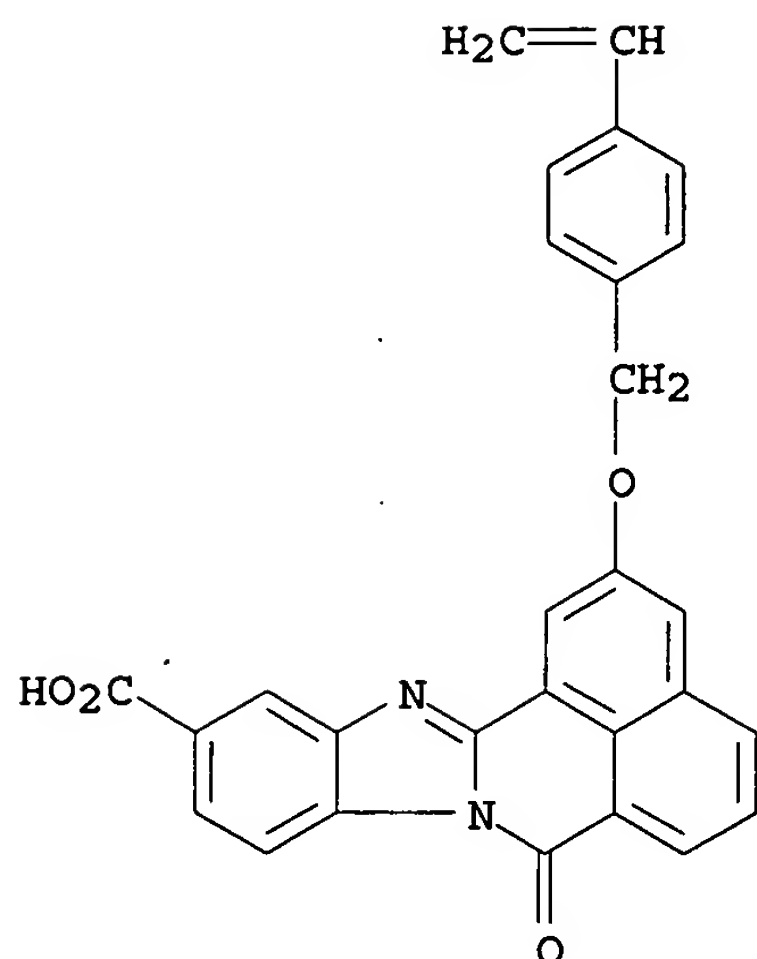
RN 371239-16-6 CAPLUS

CN 7H-Benzimidazo[2,1-a]benz[de]isoquinoline-11-carboxylic acid, 7-oxo-3-(2-propenyloxy) - (9CI) (CA INDEX NAME)



RN 371239-17-7 CAPLUS

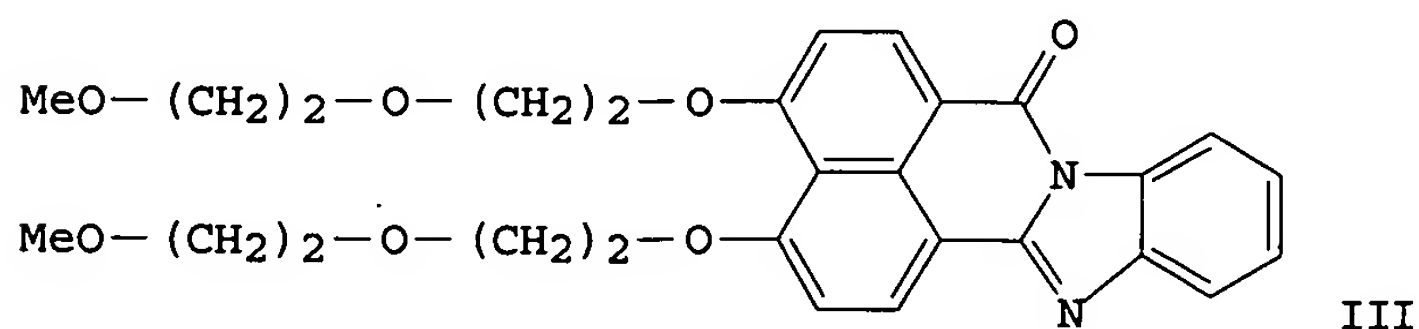
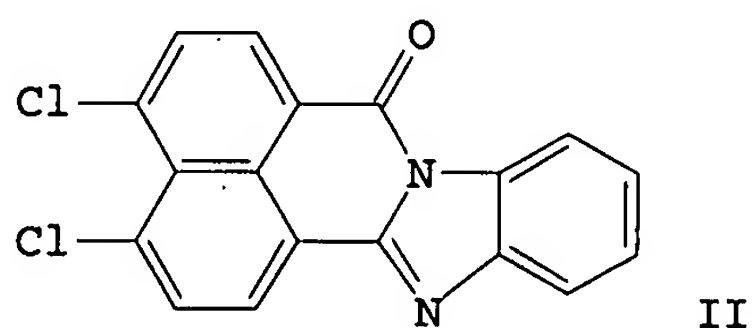
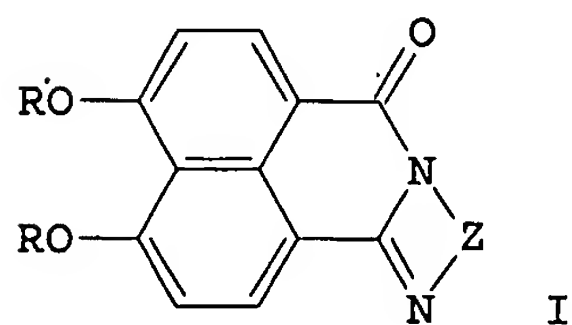
CN 7H-Benzimidazo[2,1-a]benz[de]isoquinoline-11-carboxylic acid, 2-[(4-ethenylphenyl)methoxy]-7-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1987:19993 CAPLUS
 DOCUMENT NUMBER: 106:19993
 TITLE: Naphthoylenebenzimidazole dyes
 INVENTOR(S): Himeno, Kiyoshi; Yoshihara, Junji
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61072067	A2	19860414	JP 1984-194400	19840917
JP 05039990	B4	19930616		
PRIORITY APPLN. INFO.:			JP 1984-194400	19840917
OTHER SOURCE(S):	CASREACT	106:19993		

GI



AB Naphthoylenebenzimidazole compds. I (R = alkoxyalkyl; Z = arylene) dye polyester fibers, plastics, and paper with good temperature dependence and buildup properties. Thus, KOH was dissolved in diethylene glycol monomethyl ether at 60°, and II was added, forming III as yellow crystals. Polyester fabric dyed with aqueous dispersions of III showed temperature

dependence 95% (120°/130°) and buildup 95% (6%/3%).

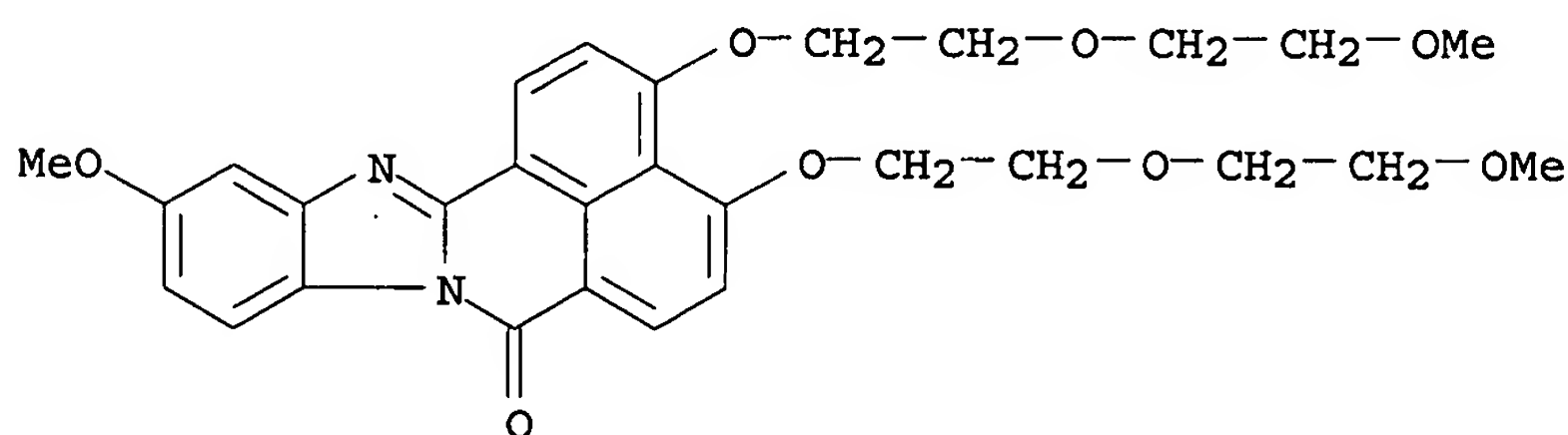
IT 106028-15-3P 106028-16-4P 106028-17-5P

RL: PREP (Preparation)

(manufacture of, as dye for polyester fibers and plastics)

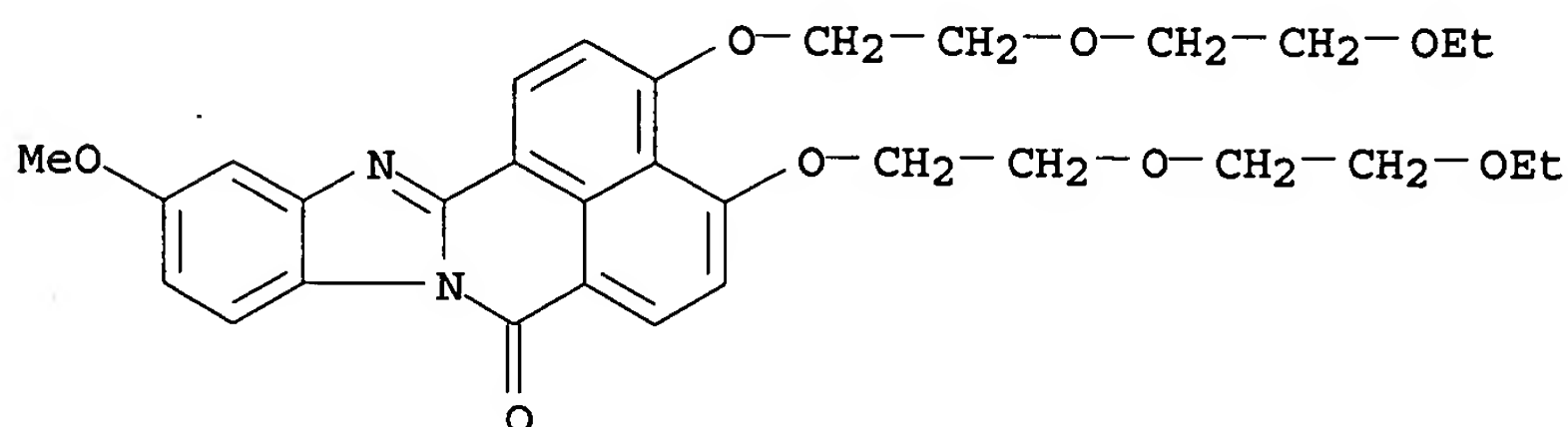
RN 106028-15-3 CAPLUS

CN 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, 11-methoxy-3,4-bis[2-(2-methoxyethoxy)ethoxy] - (9CI) (CA INDEX NAME)



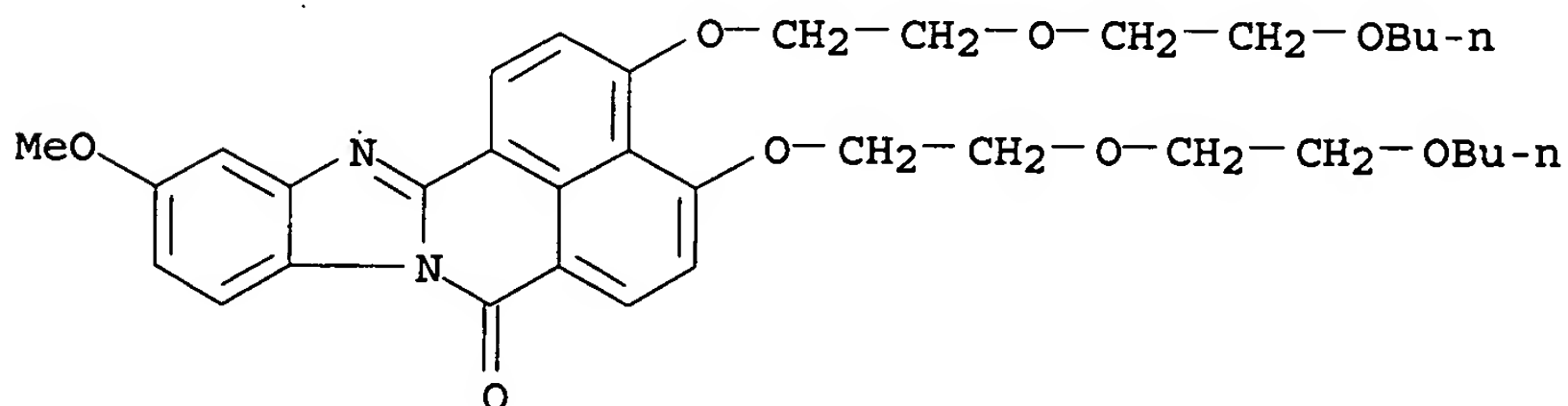
RN 106028-16-4 CAPLUS

CN 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, 3,4-bis[2-(2-ethoxyethoxy)ethoxy]-11-methoxy- (9CI) (CA INDEX NAME)



RN 106028-17-5 CAPLUS

CN 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, 3,4-bis[2-(2-butoxyethoxy)ethoxy]-11-methoxy- (9CI) (CA INDEX NAME)



10/658,715

ORIGINAL REFERENCE NO.: 62:10574d-h
 TITLE: Disperse dyes
 INVENTOR(S): Chiaki, Hisashi
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd.
 SOURCE: 4 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

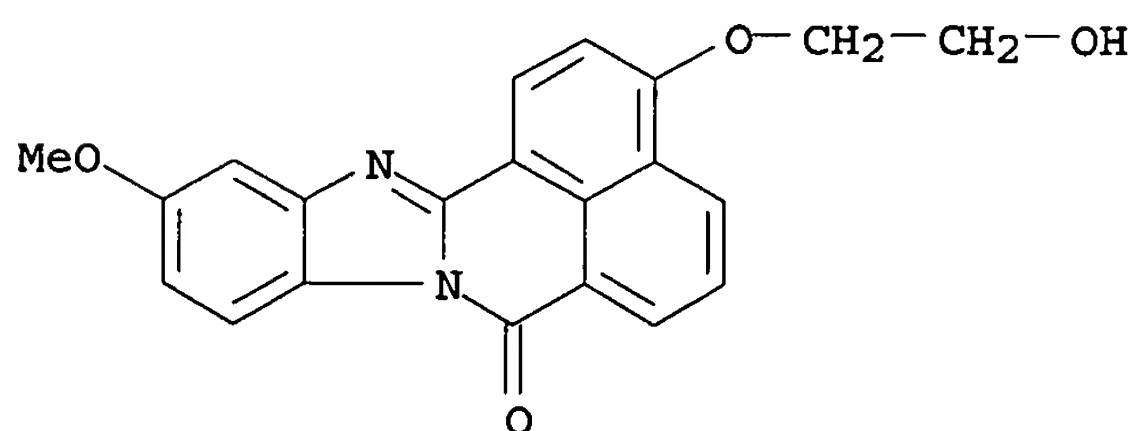
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 39027120	B4	19640000	JP	19630705
PRIORITY APPLN. INFO.:			JP	19630705

AB The title dyes I (X = RO) were prepared by treatment of I (X = SO₃Na or halogen) with ROH, where R is an alkyl, cycloalkyl, or aryl group, in the presence of alkaline condensing agents. Thus, a stirred solution of 15 g. NaOH in 150 cc. MeOH was treated with 10 g. I [X = Cl, A = 1,2-C₆H₃OMe-4 (IV)], refluxed 10 hrs., the precipitate filtered on cooling, and washed with 50 cc. MeOH and H₂O to give 7.2 g. I (X = MeO, A = IV) (V), m. 240-5°, bright green-yellow on III. V (6.3 g.) was also obtained from 10 g. I (X = SO₃Na, A = IV) by refluxing 20 hrs. in a solution of 20 g. NaOH in 200 cc. MeOH. The following I were prepared: X, A, m.p., Color on III; MeO, 1,2-C₁₀H₆, 241-9°, yellow; MeO, 1,2-C₆H₃NO₂-4, 285-92°, green-yellow; MeO, 1,2-C₆H₃Me-3, 168-72°, green-yellow; MeO, 1,8-C₁₀H₆, >310°, blue-red; HO(CH₂)₂O, IV, 272-6°, yellow; PhO, IV, 98-108°, bright yellow; BuO, IV, 249-52°, yellow; MeO(CH₂)₂O, IV, 130-60°, yellow; Me₂N(CH₂)₂O, V, 86-8°, bright yellow; PhCH₂O, IV, 206-22°, orange-yellow; C₈H₉O, IV, 288-93°, bright yellow;

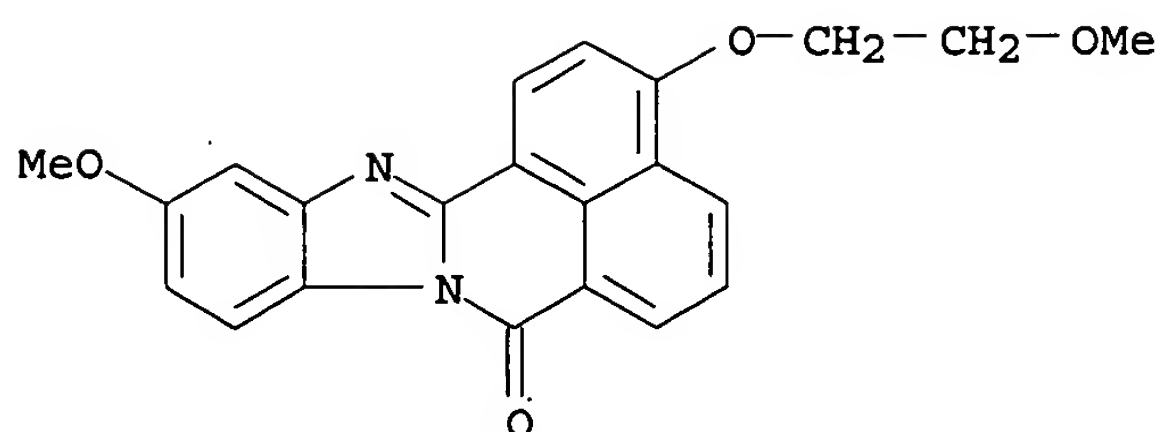
IT 3598-74-1, 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, 3-(2-hydroxyethoxy)methoxy- 4353-71-3, 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, methoxy(2-methoxyethoxy) - (preparation of)

RN 3598-74-1 CAPLUS

CN 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, 3-(2-hydroxyethoxy)methoxy- (7CI, 8CI) (CA INDEX NAME)



RN 4353-71-3 CAPLUS
 CN 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, methoxy(2-methoxyethoxy) - (7CI, 8CI) (CA INDEX NAME)



L6 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1965:59468 CAPLUS
 DOCUMENT NUMBER: 62:59468
 ORIGINAL REFERENCE NO.: 62:10574d-h
 TITLE: Disperse dyes
 INVENTOR(S): Chiaki, Hisashi
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd.
 SOURCE: 3 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 39027119	B4	19641127	JP	19630703
PRIORITY APPLN. INFO.:			JP	19630703

GI For diagram(s), see printed CA Issue.

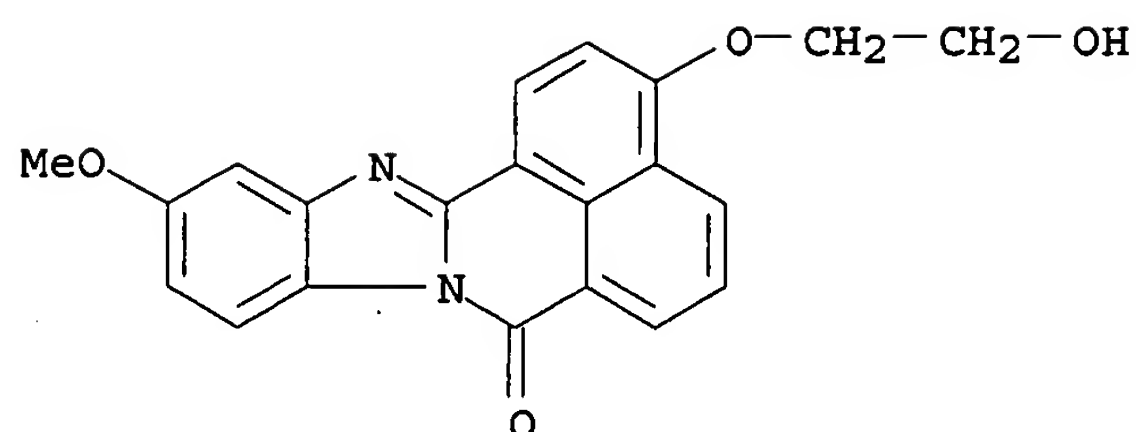
AB The title dyes I (X = halogen), where A is a 1,2-phenylene, 1,2-, or 1,8-naphthylene residue which may be substituted in the nucleus, were prepared by treatment of I (X = SO₃Na) (II) with a combination of hydrogen halide and alkali halate. The dyes are light and sublimation fast and suitable for polyester fibers (III). Thus, a solution of 40 g. II (A = 1,2-C₆H₄) in 1200 cc. H₂O was treated with 250 g. concentrated HCl, followed by dropwise addition of 23 g. NaClO₃ in 70 cc. H₂O at 95° during 10 hrs., stirred 3 hrs. at 95-100° and the precipitate filtered to give I (X = Cl, A = 1,2-C₆H₄), m. 227-31.5° bright green-yellow on III. The following I were prepared: X, A, m.p., Color on III; Br, 1,8-C₁₀H₆, 222-9.5°, red-brown; Cl, 1,2-C₆H₃Me-3, 163-9°, green-yellow; Cl, 1,2-C₆H₈OMe-4, 245-9°, green-yellow; Cl, 1,2-C₁₀H₆, 236-42°, clear yellow; Cl, 1,2-C₁₀H₃Br-4, 267-79°, orange-yellow; Cl, 1,8-C₁₀H₆, 201-18°, brown; Br, 1,2-C₆H₃OMe-4, 213-28°, clear yellow; Br, 1,2-C₁₀H₆, 210.5-15°, clear yellow;

IT 3598-74-1, 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, 3-(2-hydroxyethoxy)methoxy- 4353-71-3, 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, methoxy(2-methoxyethoxy)-(preparation of)

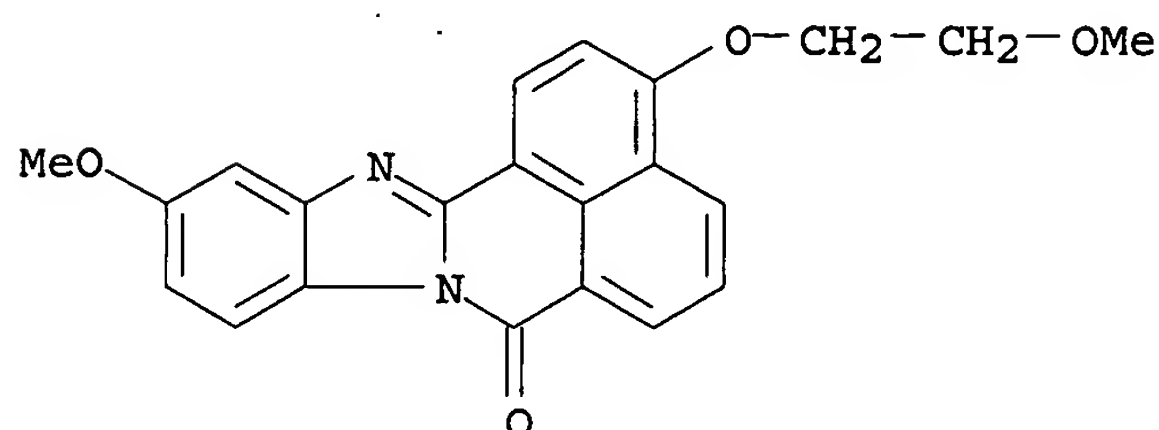
RN 3598-74-1 CAPLUS

CN 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, 3-(2-hydroxyethoxy)methoxy-(7CI, 8CI) (CA INDEX NAME)

10/658,715

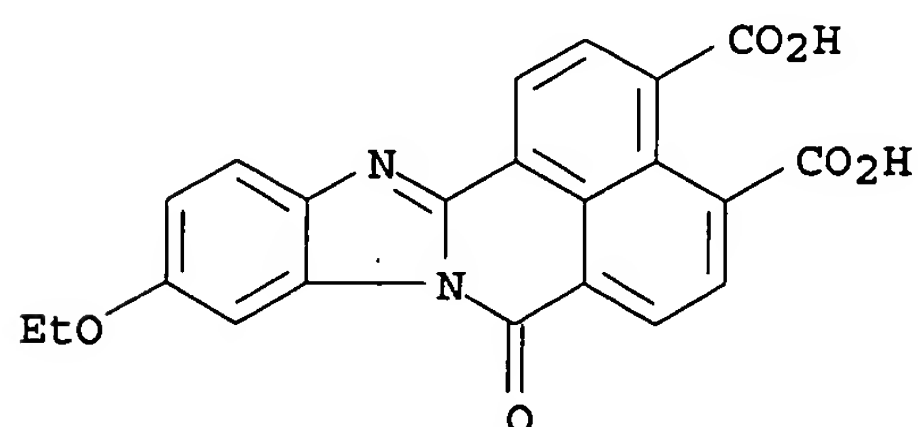


RN 4353-71-3 CAPLUS
CN 7H-Benzimidazo[2,1-a]benz[de]isoquinolin-7-one, methoxy(2-methoxyethoxy)-
(7CI, 8CI) (CA INDEX NAME)



L6 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1959:89503 CAPLUS
DOCUMENT NUMBER: 53:89503
ORIGINAL REFERENCE NO.: 53:16156d-e
TITLE: Naphthoylenebenzimidazole-peri-dicarboxylic acids
INVENTOR(S): Eckert, Wilhelm; Fuchs, Otto
PATENT ASSIGNEE(S): Farberke Hoechst AG vorm. Meister Lucius & Bruning
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	DE 1005969		19570411	DE 1954-F14322	19540331
AB	See U.S. 2,835,674 (C.A. 53, 6255d).				
IT	116665-71-5, 7H-Benzimidazo[2,1-a]benz[de]isoquinoline-3,4-dicarboxylic acid, 10-ethoxy-7-oxo- (preparation of)				
RN	116665-71-5 CAPLUS				
CN	7H-Benzimidazo[2,1-a]benz[de]isoquinoline-3,4-dicarboxylic acid, 10-ethoxy-7-oxo- (6CI) (CA INDEX NAME)				

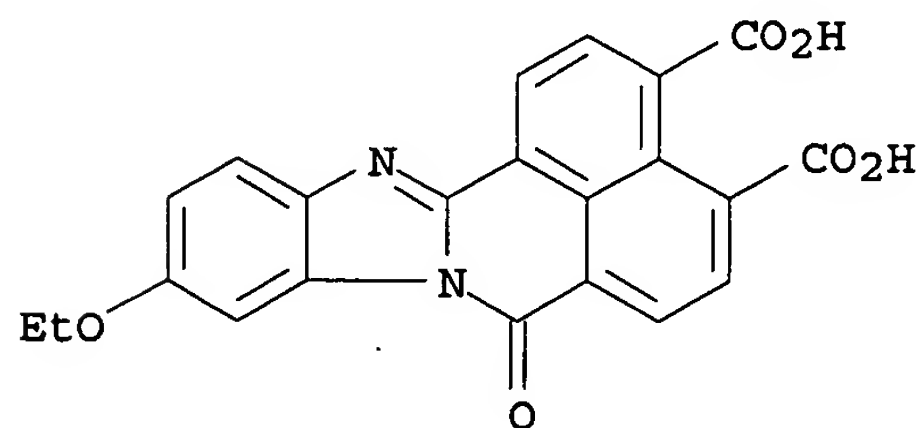


10/658,715

L6 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1959:34873 CAPLUS
DOCUMENT NUMBER: 53:34873
ORIGINAL REFERENCE NO.: 53:6255d-f
TITLE: Naphthoylenebenzimidazole-peri-dicarboxylic acids
INVENTOR(S): Eckert, Wilhelm; Fuchs, Otto
PATENT ASSIGNEE(S): Farbwerke Hoechst AG
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	US 2835674		19580520	US 1955-496921	19550325
AB	Condensation of 1,4,5,8-naphthalenetetra-carboxylic acid (I) with o-phenylenediamine (II) (or with substituted II) in aqueous media of high salt concentration buffered at pH 5.0-5.8 yields the insol. mono-Na salt (III) of N-phenyl-naphthalimide-1,8-dicarboxylic acid (IV), readily converted in near-quant. over-all yield to naphthoylenebenzimidazole-peri-dicarboxylic acid (V) (or the corresponding anhydride), useful as a dye intermediate. Thus, 300 g. I is dissolved in a hot solution of 2 kg. crystalline NaOAc in 9 l. H ₂ O, 130 g. II added, the mixture stirred 8-10 hrs. at 75°, cooled, the precipitated III (fine light yellow prisms) filtered off, washed with 10% aqueous NaCl, suspended in 3 l. H ₂ O, dissolved by addition of aqueous Na ₂ CO ₃ , and filtered free of small amts. of alkali-insol. material. Addition of dilute HCl to the cold filtrate yields IV. Acidification at the b.p. of the filtrate and boiling the resulting mixture for some time converts IV to V (or its anhydride), orange powder yielding yellow alkaline solns. III is also prepared by heating 30 g. I, 14 g. II, 286 g. borax, and 500 g. NaH ₂ PO ₄ in 800 ml. H ₂ O 6 hrs. at 75°. Use of substituted II gives 4-Cl, 4,5-di-Cl, 4-Me, and 4-OEt derivs. of V.				
IT	116665-71-5, 7H-Benzimidazo[2,1-a]benz[de]isoquinoline-3,4-dicarboxylic acid, 10-ethoxy-7-oxo- (preparation of)				
RN	116665-71-5 CAPLUS				
CN	7H-Benzimidazo[2,1-a]benz[de]isoquinoline-3,4-dicarboxylic acid, 10-ethoxy-7-oxo- (6CI) (CA INDEX NAME)				



=> d his

(FILE 'HOME' ENTERED AT 10:48:38 ON 12 JUL 2006)

FILE 'REGISTRY' ENTERED AT 10:48:54 ON 12 JUL 2006

L1 STRUCTURE UPLOADED

10/658,715

L2 50 S L1
L3 STRUCTURE UPLOADED
L4 1 S L3
L5 17 S L3 FULL

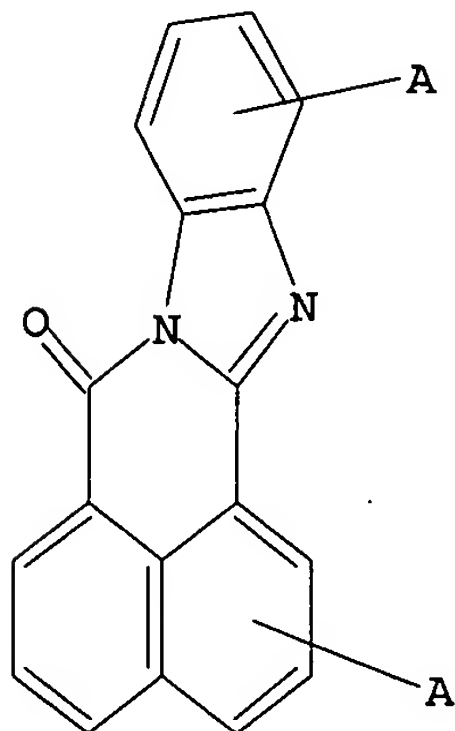
FILE 'CAPLUS' ENTERED AT 10:53:24 ON 12 JUL 2006

L6 9 S L5

=> d l1

L1 HAS NO ANSWERS

L1 STR

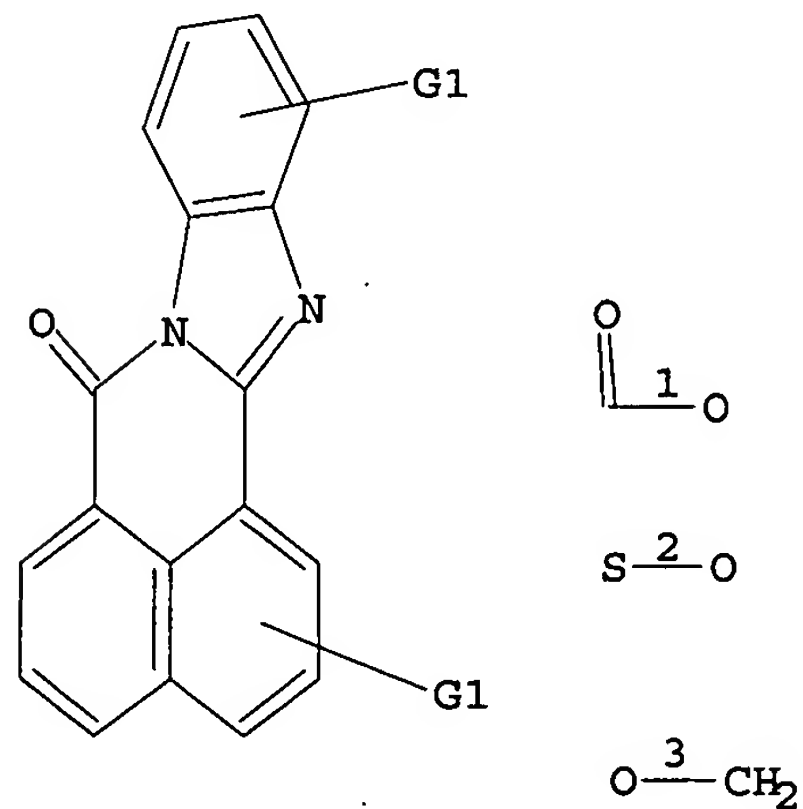


Structure attributes must be viewed using STN Express query preparation.

=> d l3

L3 HAS NO ANSWERS

L3 STR



G1 [01], [02], [03]

Structure attributes must be viewed using STN Express query preparation.

=>